

In the Claims

Applicant has submitted a complete claim set for the Examiner's convenience. No claim amendments have been made.

1. (Original) A method for treating a subject to reduce the likelihood of streptococcal infection comprising
administering orally to a subject in need of such treatment an agent that binds to a hyaluronic acid-binding region of a CD44 protein in an amount effective to interfere with adhesion of streptococcal bacteria to CD44 protein in the subject and inhibit streptococcal colonization of the pharynx, wherein either one or both of the following conditions applies: the treatment is free of Echinacea or the agent is administered in a dose greater than 0.2 mg.
2. (Original) The method of claim 1, wherein the effective amount of the agent administered to the subject in need of such treatment statistically reduces the likelihood of infection.
3. (Original) The method of claim 1, wherein the agent is administered to a subject suspected of exposure to Group A streptococcus or Group C streptococcus.
4. (Original) The method of claim 3, wherein the subject is known to have been exposed to streptococcal bacteria.
5. (Original) The method of claim 3, wherein the subject is likely to be exposed to streptococcal bacteria.
6. (Original) The method of claim 1, wherein the subject is a human.
7. (Original) The method of claim 1, wherein the subject is in need of such treatment to reduce the likelihood of streptococcal pharyngitis.

8. (Original) The method of claim 1, wherein the CD44 protein in the subject in need of such treatment is located on the pharynx.
9. (Original) The method of claim 1, wherein the agent is hyaluronic acid or an analog of hyaluronic acid.
10. (Original) The method of claim 9, wherein the agent is a peptide.
11. (Original) The method of claim 10, wherein the peptide is an antibody.
12. (Original) The method of claim 1, wherein the dose is a single oral administration of hyaluronic acid.
13. (Original) The method of claim 1, wherein the dose is multiple oral administrations of hyaluronic acid.
14. (Original) The method of claim 1, wherein a dose of at least 0.2 mg is administered in under 2 hours.
15. (Original) The method of claim 1, wherein a dose of at least 0.2 mg is administered in under 1 hour.
16. (Original) The method of claim 1, wherein a dose of at least 0.2 mg is administered in under 30 minutes.
17. (Original) The method of claim 1, wherein a dose of at least 0.2 mg is administered in under 15 minutes.
18. (Previously Amended) The method of claim 14, wherein the dose is at least 0.25mg, 0.30mg, 0.40mg, 0.50mg, 0.60mg, 0.70mg, 0.80mg, 0.90mg, 1.0mg, 1.25mg, 1.5mg, 1.75mg,

2.0mg, 2.25mg, 2.5mg, 2.75mg, 3.0mg, 4.0mg, 5.0mg, 6.0mg, 7.0mg, 8.0mg, 9.0mg, or 10.0mg hyaluronic acid.

19. (Original) The method of claim 14, wherein the dose is administered in under 1.5 hours, 1.0 hours, 45 minutes, 30 minutes, 15 minutes, 10 minutes, 5 minutes, 4 minutes, 3 minutes, 2 minutes, 1 minutes, 30 seconds, 15 seconds, 10 seconds, 5 seconds, or 1 second.

20. (Cancelled)

21. (Original) The method of claim 18, wherein the treatment is free of Echinacea.

22. (Original) The method of claim 1, wherein the treatment is free of Echinacea.

23. (Original) A method for treating a subject to reduce the likelihood of streptococcal infection comprising

administering orally to a subject in need of such treatment an agent that binds to a hyaluronic acid-binding region of a CD44 protein in an amount effective to displace streptococcal bacteria to CD44 protein in the subject and inhibit streptococcal colonization of the pharynx, wherein either one or both of the following conditions applies: the treatment is free of Echinacea or the agent is administered in a dose greater than 0.2 mg.

24-44. (Cancelled)

45. (Original) A method for treating a subject to reduce the likelihood of streptococcal or staphylococcal infection comprising

administering orally to a subject in need of such treatment an agent that binds to a hyaluronic acid-binding region of a CD44 protein of a mucosal membrane in an amount effective to interfere with adhesion of streptococcal or staphylococcal bacteria to the mucosal membrane in the subject, wherein either one or both of the following conditions applies: the treatment is free of Echinacea or the agent is administered in a dose greater than 0.2 mg.

46-67. (Cancelled)

68. (Original) A method for treating a subject to reduce the likelihood of streptococcal or staphylococcal infection comprising

administering orally to a subject in need of such treatment an agent that binds to a hyaluronic acid-binding region of a CD44 protein of a mucosal membrane in an amount effective to displace streptococcal or staphylococcal bacteria bound to the mucosal membrane in the subject, wherein either one or both of the following conditions applies: the treatment is free of Echinacea or the agent is administered in a dose greater than 0.2 mg.

69-90. (Cancelled)

91. (Withdrawn) A method for treating a subject to reduce the likelihood of streptococcal or staphylococcal infection comprising

administering nasally to a subject in need of such treatment who does not have a nasal cavity wound, an agent that binds to a hyaluronic acid-binding region of a CD44 protein of a mucosal membrane in an amount effective to interfere with adhesion of streptococcal or staphylococcal bacteria to the mucosal membrane in the subject, wherein either one or both of the following conditions applies: the treatment is free of Echinacea or the agent is administered in a dose greater than 0.2 mg.

92-114. (Cancelled)

115. (Withdrawn) A method for treating a subject to reduce the likelihood of streptococcal or staphylococcal infection comprising

administering nasally to a subject in need of such treatment who does not have a nasal cavity wound, an agent that binds to a hyaluronic acid-binding region of a CD44 protein of a mucosal membrane in an amount effective to displace streptococcal or staphylococcal bacteria bound to the mucosal membrane in the subject, wherein either one or both of the following

conditions applies: the treatment is free of Echinacea or the agent is administered in a dose greater than 0.2 mg.

116-138. (Cancelled)

139. (Withdrawn) A medicinal product comprising a syrup containing an amount of hyaluronic acid effective to interfere with adhesion of streptococcal bacteria to CD44 protein in a subject and to inhibit streptococcal colonization of a pharynx of the subject.

140. (Withdrawn) A medicinal product comprising a syrup containing an amount of hyaluronic acid effective to displace streptococcal bacteria bound to CD44 protein in a subject and to inhibit streptococcal colonization of a pharynx of the subject.

141. (Withdrawn) A medicinal product comprising a syrup containing an amount of hyaluronic acid effective to interfere with adhesion of streptococcal or staphylococcal bacteria to a mucosal membrane in a subject.

142. (Cancelled)

143. (Withdrawn) A medicinal product comprising a syrup containing an amount of hyaluronic acid effective to displace streptococcal or staphylococcal bacteria bound to a mucosal membrane in a subject.

144. (Cancelled)

145. (Withdrawn) A medicinal product comprising a frozen solution containing an amount of hyaluronic acid effective to interfere with adhesion of streptococcal bacteria to CD44 protein in a subject and to inhibit streptococcal colonization of a pharynx of the subject.

146. (Withdrawn) A medicinal product comprising a frozen solution containing an amount of hyaluronic acid effective to displace streptococcal bacteria bound to CD44 protein in a subject and to inhibit streptococcal colonization of a pharynx in the subject.

147. (Withdrawn) A medicinal product comprising a frozen solution containing an amount of hyaluronic acid effective to interfere with adhesion of streptococcal or staphylococcal bacteria to a mucosal membrane in a subject.

148. (Cancelled)

149. A medicinal product comprising a frozen solution containing an amount of hyaluronic acid effective to displace streptococcal or staphylococcal bacteria bound to a mucosal membrane in a subject.

150. (Cancelled)

151. (Withdrawn) A medicinal product comprising a solid solution containing an amount of hyaluronic acid effective to interfere with adhesion of streptococcal bacteria to CD44 protein in a subject and to inhibit streptococcal colonization of a pharynx of the subject.

152. (Withdrawn) A medicinal product comprising a solid solution containing an amount of hyaluronic acid effective to displace streptococcal bacteria bound to CD44 protein in a subject and to inhibit streptococcal colonization of a pharynx of the subject.

153. (Withdrawn) A medicinal product comprising a solid solution containing an amount of hyaluronic acid effective to interfere with adhesion of streptococcal or staphylococcal bacteria to a mucosal membrane in a subject.

154. (Cancelled)

155. (Withdrawn) A medicinal product comprising a solid solution containing an amount of hyaluronic acid effective to displace streptococcal or staphylococcal bacteria bound to a mucosal membrane in the subject.

156. (Cancelled)

157. (Withdrawn) A medicinal product comprising a semi-solid solution containing an amount of hyaluronic acid effective to interfere with adhesion of streptococcal bacteria to CD44 protein in a subject and to inhibit streptococcal colonization of a pharynx of the subject.

158. (Withdrawn) A medicinal product comprising a semi-solid solution containing an amount of hyaluronic acid effective to displace streptococcal bacteria bound to CD44 protein in a subject and to inhibit streptococcal colonization of a pharynx of the subject.

159. (Withdrawn) A medicinal product comprising a semi-solid solution containing an amount of hyaluronic acid effective to interfere with adhesion of streptococcal or staphylococcal bacteria to a mucosal membrane in a subject.

160. (Cancelled)

161. (Withdrawn) A medicinal product comprising a semi-solid solution containing an amount of hyaluronic acid effective to displace streptococcal or staphylococcal bacteria bound to a mucosal membrane in a subject.

162. (Cancelled)